

IN THE SPECIFICATION

Please amend the Specification as follows:

Page 4, lines 1-6, please rewrite this paragraph as indicated below:

Since the first enterprise development systems became available, Network Operating Systems (NOS) have been quietly maturing in the background. Modern NOS's, such as ~~Microsoft's NT4 Server~~ MICROSOFT NT4 SERVER (trademark of Microsoft Corporation for a network operating system) have been built in object (document) level security, replication and file systems databases, such as ~~Exchange~~ MICROSOFT EXCHANGE (trademark of Microsoft Corporation) eliminating the need to rebuild these things as expensive add-ins.

Page 4, lines 7-9, please rewrite this paragraph as indicated below:

NOS's have matured to the point where much of what a document management system does is already built into the NOS or tightly integrated components, like ~~Exchange~~ MICROSOFT EXCHANGE and ~~Office~~ MICROSOFT OFFICE (both trademarks of Microsoft Corporation.)

Page 4, lines 12-17, please rewrite this paragraph as indicated below:

The invention, in its broadest sense, is a document management extension system for ~~Microsoft Exchange~~ MICROSOFT

EXCHANGE (trademark of Microsoft Corporation), wherein the system merges the functionality of index databases, file repositories and messaging systems using ~~Exchange~~ MICROSOFT EXCHANGE (trademark) and leverages the tight integration of MICROSOFT EXCHANGE (trademark) and an NT Server for security and redundancy management.

Page 4, lines 10-15, please rewrite this paragraph as indicated below:

Document Management Extensions (DME) for ~~Microsoft~~ ~~Exchange (DME)~~ MICROSOFT EXCHANGE (trademark) is a document management system for everyone. DME merges the traditional functionality of index databases, file repositories and messaging systems by using ~~Exchange~~ MICROSOFT EXCHANGE 5.0 (trademark of Microsoft Corporation) and leverages the tight integration of ~~Exchange~~ MICROSOFT EXCHANGE 5.0 and an NT ~~Server~~ SERVER 4.0 (trademark of Microsoft Corporation) for security and redundancy management.

Page 6, lines 5-13, please rewrite this paragraph as indicated below:

Applications supported by DME in Release 1.0 were [[Word]] MICROSOFT WORD 97 (trademark), ~~PowerPoint 97, Binder 97, Excel 97 and Outlook 97.~~ POWERPOINT 97, BINDER 97, EXCEL 97 and OUTLOOK 97 (trademarks). ~~Eastman~~ EASTMAN (trademark of WANG) Image Viewer and ~~Windows Paintbrush~~ MICRO-

SOFT WINDOWS PAINTBRUSH (trademark of Microsoft Corporation)
are also supported. At some future time, ~~non Office~~
non-MICROSOFT OFFICE ("MICROSOFT OFFICE" is a trademark of
Microsoft Corporation) applications may be directly sup-
ported. Three MICROSOFT OFFICE ~~Office~~ 97 (trademark)
applications support the Open Document Management API. DME
leverage this support. Non-ODMA compliant applications, such
as ~~Outlook 97 and Excel 97~~ MICROSOFT OUTLOOK 97 (trade-
mark) and MICROSOFT EXCEL 97 (trademark) use macro interfaces
to arrive at the same result. From the user's point of view,
all applications behave in exactly the same fashion.

Page 6, line 14 - Page 7, line 13, please rewrite this
paragraph as indicated below:

~~Word 97, Binder 97 and PowerPoint 97~~

MICROSOFT WORD 97, BINDER 97 AND POWERPOINT 97 (Trademarks)

The Open Document Management API (ODMA) is the acknowledged
standard API for access to Document Management Systems.

MICROSOFT WORD 97, BINDER 97 and POWERPOINT 97 (trademarks)

~~Word 97, Binder 97 and PowerPoint 97~~ are ODMA compliant
applications. MICROSOFT WORD 97, BINDER 97 and POWERPOINT 97

~~Word 97, Binder 97 and PowerPoint 97~~ register themselves
with DME using an ODMRegisterApp call to the ODMA Connection
Manager (ODMA32.DLL). ODMA returns a handle for the applica-
tion to use for identification in all subsequent calls. When
the application exits, it calls ODMUnRegisterApp to return
the handle. As part of this registration process, ODMA

searches the Registry for entries in HKEY_Local_Machine/
Software/Classes/ODMA32. It tries to connect to the first
Document Management System (DMS) key with a sub-key named
DEFAULT. The value of the DMS key is the path to the DME DLL
that provides the functionality specified by ODMA. All
screens for selecting and setting properties of documents
come from Document Management Extensions for ~~Microsoft~~
~~Exchange~~ MICROSOFT EXCHANGE (trademark.) The DME search
application (discussed separately below) interacts independ-
ently with the DME DLL rather than via an application.

Page 7, lines 14-19, please rewrite this paragraph as
indicated below:

MICROSOFT EXCEL 97 and MICROSOFT OUTLOOK 97 (Trademarks)
Neither ~~Excel 97 nor Outlook 97~~ MICROSOFT EXCEL 97 nor
MICROSOFT OUTLOOK 97 are ODMA compliant applications. For
these applications, macrocode replaces the ODMA.32.DLL calls
in the ODMA model. The macros are not editable by the user.
To the user, there is no difference in application behavior
as between an ODMA and a non-ODMA application.

Page 8, lines 2-8, please rewrite this paragraph as
indicated below:

The interaction between ~~Exchange Server~~ MICROSOFT
EXCHANGE SERVER and Internet/Intranet users is provided by
Microsoft Corporation's Internet Information Server (IIS) 3.0
Active Server Pages in conjunction with ~~Exchange Server~~

MICROSOFT EXCHANGE 5.0 Active Server Components. ~~Outlook~~
MICROSOFT OUTLOOK or ~~Exchange~~ MICROSOFT EXCHANGE user
sessions establish direct MAPI connections with ~~Exchange~~
~~Server~~ MICROSOFT EXCHANGE SERVER, whereas DME and
browsers use Active Messaging objects to access the
~~Exchange~~ MICROSOFT EXCHANGE public folders.

Page 9, lines 10-18, please rewrite this paragraph as
indicated below:

When a user opens a document using Document Management Exten-
sions for ~~Microsoft Exchange~~, MICROSOFT EXCHANGE, the
following process occurs:

- The DME Service sets a flag in the DME object Store by
setting the Status property to OPEN and by inserting the
time and user's name in the StatusInfo property.
- The DME Service copies the object from the public DME
store to the user's mailbox.
- The document is copied from there to a local TEMP
directory for editing by the DME user.

Page 12, lines 1-10, please rewrite this paragraph as
indicated below:

MICROSOFT WINDOWS ~~Windows~~ 95 (NT Workstation) Desktop
Integration (Shell Extensions)

DME modifies the following parts of the MICROSOFT WINDOWS
(trademark of Microsoft Corporation for operating system)

~~Windows~~ 95 (Windows NT) shell:

- DME folders are added to the ~~Windows Explorer and Outlook 97.~~ MICROSOFT WINDOWS EXPLORER and MICROSOFT OUTLOOK 97.
- The Start Menu is modified.
- An application is added to the system tray.
- An item is added to the context (right click) menu for some document types.

Page 12, line 11 - Page 13, line 2, please rewrite these paragraphs as indicated below:

MICROSOFT WINDOWS ~~Windows~~ 95 ~~Explorer~~ EXPLORER
(namespace extensions)

A DME name space extension is added to the shell. This appears as a child of 'My Computer' in ~~Explorer.~~

MICROSOFT EXPLORER (trademark of Microsoft Corporation for Internet browser.) DME contains a folder named 'My Documents' which contains the results of a stored query of DME that returns all (with a preset limit) documents for which the user is the creator.

The user may create other sub-folders of the DME object by saving searches of the document set. When the user saves searches in Document Management Extensions for ~~Microsoft Exchange,~~ MICROSOFT EXCHANGE, those searches appear as sub-folders of the DME object.

Page 13, lines 3-13, please rewrite this paragraph as indicated below:

~~Outlook~~ MICROSOFT OUTLOOK 97 (name space extensions)

Browsing Documents

DME is logically an extension of the file system (rather than the messaging system) and should therefore appear as such in ~~Outlook~~ MICROSOFT OUTLOOK 97. The folder 'Document Manager' is a shortcut to the name space extension found in ~~Windows Explorer~~ WINDOWS EXPLORER, which gives you access to one's saved searches and works in a similar manner as the 'My Documents' shortcut, which points to the system folder 'My Documents' on the local drive of the host. The DME document store will not appear as part of the ~~Exchange~~ MICROSOFT EXCHANGE (trademark) Folder Tree either as a public folder or as a private folder.

Page 14, lines 14-17, please rewrite this paragraph as indicated below:

The "In the Document Manager..." option on the start menu under Find launches an application for searching the DME store that is almost identical in appearance to the normal ~~Windows~~ MICROSOFT WINDOWS 95/NT4 Find program.

Page 17, lines 15-17, please rewrite this paragraph as indicated below:

Document Management Extensions for ~~Microsoft Exchange's~~ MICROSOFT EXCHANGE's Object Store and structured index is contained in full within [[an]] ~~Exchange~~ MICROSOFT EXCHANGE 5.0 public information store.

Page 18, lines 1-10, please rewrite this paragraph as indicated below:

To function as a document management system, DME must prevent uncontrolled and unauthorized access to its object store. The only method of access to the DME store is programmatically (ie via Document Management Extensions for ~~Microsoft Exchange~~ MICROSOFT EXCHANGE). DME implements access security using the ~~Exchange~~ MICROSOFT EXCHANGE address book. The type of security applicable to a document is similar to that of an exchange folder. Since no user except the administrator can access the store within using DME the ~~Exchange~~ MICROSOFT EXCHANGE Server automatically implements all external (to Document Management Extensions for ~~Microsoft Exchange~~ MICROSOFT EXCHANGE) security.

Page 20, lines 9-16, please rewrite these paragraphs as indicated below:

Full text searching is available on all DME documents. The user access the functionality either from ~~[[an]]~~ a DME 'Open' dialog within a supported application ('Find in Text' field) or via the 'Find Document' item on the ~~Windows~~ MICROSOFT WINDOWS 95 (NT Workstation) operating system 'Start' menu and other up-dates of the MICROSOFT WINDOWS operating system. ~~Windows.~~ The user may also perform ~~[[an]]~~ MICROSOFT INTERNET EXPLORER (trademark for Internet browser by Microsoft Corporation) ~~Internet Explorer~~ based full text (or attribute) search.

DME use the ~~Fulcrum~~ FULCRUM (trademark) Knowledge Network and ~~Fulcrum~~ FULCRUM Exchange Connector to provide this functionality.

Page 21, lines 8-16, please rewrite this paragraph as indicated below:

In addition to all ~~Microsoft Exchange~~ MICROSOFT EXCHANGE administration options, the ~~Exchange~~ MICROSOFT EXCHANGE administrator is able to:

- Create and delete Document Types.
- Set archive properties (and eventually replication properties) in relation to those Documents Types.
- Search across the whole document management extension ~~organisation~~ organization - (Global Administrator Search) regardless of document permission, but is unable to open or view documents without explicit permission.

Page 23, lines 4-12, please rewrite these paragraphs as indicated below:

Internet Browser Integration

DME supports a Browser interface that permits remote searching and browsing of documents using ~~Microsoft~~ ~~Office (Word, Excel and PowerPoint 97)~~ MICROSOFT OFFICE (MICROSOFT WORD, MICROSOFT EXCEL and MICROSOFT POWERPOINT 97) viewers. Though editing was not available in release 5.0, it has become available in subsequent document extension programs.

Versioning

DME versioning is identical in look and feel to the existing [[Word]] MICROSOFT WORD 97 and updates versioning.

Page 24, lines 6-13, please rewrite this paragraph as indicated below:

~~Windows 95~~ MICROSOFT WINDOWS 95 (NT Workstation) Desktop Integration

DME modifies the following parts of the ~~Windows~~ MICROSOFT WINDOWS 95 (Windows NT) operating system desktop:

- DME folders are added to the ~~Explorer~~ MICROSOFT INTERNET EXPLORER 95 and ~~Outlook~~ MICROSOFT OUTLOOK 97.
- The Start Menu is modified.
- An application is added to the system tray.
- An item is added to the context (right click) menu for some document types.

Page 24, line 14 - Page 25, line 7, please rewrite these paragraphs as indicated below:

~~Windows 95 Explorer~~ MICROSOFT WINDOWS 95 EXPLORER

"Document Manager" appears as a child of 'My Computer' in

~~Explorer~~ MICROSOFT EXPLORER Internet browser. [[.]]

"Document Manager" contains a folder named 'My Documents' which contains the results of a stored query of DME that returns all (within a preset limit) documents for which the user is the creator.

The user may create other sub-folders of the "Document

Manager" folder by saving searches of the document set. When the user saves searches in Document Management Extensions for ~~Microsoft Exchange,~~ MICROSOFT EXCHANGE, those searches appear as sub-folders of the "Document Manager" folder.

Page 25, lines 8-18, please rewrite this paragraph as indicated below:

MICROSOFT OUTLOOK ~~Outlook~~ 97

Browsing documents

DME is logically an extension of the file system (rather than the messaging system) and should therefore appear as such in ~~Outlook~~ MICROSOFT OUTLOOK 97. The folder 'Document Manager' is a shortcut to the namespace extension found in ~~Windows~~ MICROSOFT WINDOWS Explorer which gives you access to your saved searches and works in a similar manner as the 'My Documents' shortcut which points to the system folder 'My Documents' on the local drive of the host. The DME document store will not appear as part of the ~~Exchange~~ MICROSOFT EXCHANGE Folder Tree either as a public folder or as a private folder.

Page 26, lines 1-4, please rewrite this paragraph as indicated below:

Journal

Documents accessed via DME will update the ~~Outlook~~ MICROSOFT OUTLOOK 97 journal. This effectively provides a history functionality of the document management system at a user view level.

Page 27, lines 4-8, please rewrite this paragraph as indicated below:

Document Find

The "In the Document Manager" found under the Find option on the start menu launches an application for searching the DME store that is almost identical in appearance to the normal ~~Windows~~ MICROSOFT WINDOWS 95/NT4 Find program.

Page 29, lines 10-13, please rewrite this paragraph as indicated below:

Custom Records Management HTML Forms

A DME Administrator (or user) can create HTML forms using a simple HTML editor (such as ~~Microsoft Front Page Express~~ MICROSOFT FRONT PAGE EXPRESS, a trademark of the Microsoft Corporation) for use as a data entry form for Records Management purposes.